



NOAA in Your Backyard – The Northwest Region

Educational Opportunities and Education and Outreach Specialists for ID, MT, OR, WA, and Northern CA

NOAA in Your State – State by State Listings of NOAA Facilities and Programs

** A summary of NOAA facilities, staff, programs, or activities based in, or focused on, your state or territory.*

- <http://www.legislative.noaa.gov/NIYS/>

National Weather Service – School Visits, Forecast Office Tours, Student and Educator Resources

** The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas.*

- **Sacramento Weather Forecast Office** – Sacramento, CA - <http://www.wrh.noaa.gov/sto/ofcinfo.php>
Contact: Michelle Mead (Warning Coordination Meteorologist) – michelle.mead@noaa.gov
- **Boise Weather Forecast Office** – Boise, ID - <http://www.wrh.noaa.gov/boi/>
Contact: Jay Breidenbach (Warning Coordination Meteorologist) – jay.breidenbach@noaa.gov
- **Medford Weather Forecast Office** – Medford, OR - <http://www.wrh.noaa.gov/mfr/information/index.php>
Contact: Ryan Sandler (Warning Coordination Meteorologist) – ryan.sandler@noaa.gov
- **Portland Weather Forecast Office** – Portland, OR - <http://www.wrh.noaa.gov/pqr/requestatour.php>
Contact: Tyree Wilde (Warning Coordination Meteorologist) - tyree.wilde@noaa.gov
- **Seattle Weather Forecast Office** – Seattle, WA - <http://www.wrh.noaa.gov/sew/educational.php>
Contact: Ted Buehner (Warning Coordination Meteorologist) - ted.buehner@noaa.gov
- **Spokane Weather Forecast Office** – Spokane, WA - <http://www.wrh.noaa.gov/otx/outreach.php>
Contact: Andrew Brown (Warning Coordination Meteorologist) – andrew.brown@noaa.gov

National Estuarine Research Reserve System – Field Trips, Professional Development, Educator Resources

** The National Estuarine Research Reserves System protects more than 1.3 million coastal and estuarine acres in 28 reserves located in 22 states and Puerto Rico for purposes of long-term research, environmental monitoring, education and stewardship.*

- **National Website** – www.nerrs.noaa.gov and www.estuaries.noaa.gov
- **Elkhorn Slough Reserve (CA)**: <http://www.elkhornslough.org/education/index.htm>
Contact: Amanda Ankenbrandt (Education Program Coordinator) - Amanda.Ankenbrandt@wildlife.ca.gov
- **San Francisco Bay Reserve (CA)**: <http://www.sfbaynerr.org/education/>
Contact: Sarah Ferner (Education Coordinator) – daviess@sfsu.edu
- **South Slough Reserve (OR)**: <http://www.oregon.gov/dsl/SSNERR/Pages/edmain.aspx>
Contact: Tom Gaskill (Education Program Coordinator) - tom.gaskill@state.or.us
- **Padilla Bay Reserve (WA)**: <http://www.ecy.wa.gov/programs/sea/padillabay/education/index.html>
Contact: Glen “Alex” Alexander (Education Coordinator) – alex@padillabay.gov

National Sea Grant Program – Professional Development, Curriculum, Student and Educator Resources

** Sea Grant is a nationwide network of 33 university-based programs that conduct scientific research, education, training, and extension projects designed to foster science-based decisions about the use and conservation of our aquatic resources.*

- **National Website** – www.seagrants.noaa.gov/HowWeWork/Education.aspx and <http://www.seagranted.net>
- **California Sea Grant** – <http://www-csgc.ucsd.edu/EDUCATION/educationIndx.html>
Contact: Caitlin Coomber (Communications Specialist) – ccoomber@ucsd.edu
- **Oregon Sea Grant** – <http://seagrants.oregonstate.edu/education>
Contact: Tracy Crews (Marine Education Coordinator) - tracy.crews@oregonstate.edu
- **Washington Sea Grant** – <https://www.wsg.washington.edu/students-teachers/>
Contact: Maile Sullivan (Education Specialist) – mailesul@uw.edu



NOAA Fisheries in the Northwest – *Student Opportunities, Laboratory Facilities, NOAA Scientists*

** The NOAA Fisheries Service is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems. They have regional offices and several smaller field offices.*

- **National Website** – www.nmfs.noaa.gov/stories/2012/10/noaa_fisheries_education.html
- **Alaska Fisheries Science Center:** <http://www.afsc.noaa.gov/Education/default.htm>
Contacts: Lisa Hiruki-Raring (Education Coordinator, Seattle) – lisa.hiruki-raring@noaa.gov
Laboratory Facilities: Newport, OR; Seattle, WA (also facilities in Alaska)
- **Northwest Fisheries Science Center (Seattle, WA):** <http://www.nwfsc.noaa.gov/education/index.cfm>
Contact: Casey Ralston (Education Coordinator) – casey.ralston@noaa.gov
Laboratory Facilities: Newport, OR; Pasco, WA; Manchester, WA; Montlake, WA; Point Adams, OR; and Mukilteo, WA
- **West Coast Regional Office (Seattle, WA):** <http://www.westcoast.fisheries.noaa.gov/education/index.html>
Contact: Alicia Keefe (Education and Outreach Specialist) – Alicia.keefe@noaa.gov
Field Offices: Lacey, WA; Ellensburg, WA; Portland, OR; Roseburg, OR; La Grande, OR; Boise, ID; Salmon, ID; Grangeville, ID; Sacramento, CA; Arcata, CA; and Santa Rosa, CA

NOAA National Marine Sanctuaries – *Field Trips, Professional Development, Educator Resources*

** NOAA's 15 National Marine Sanctuaries serve as the trustee for the nation's system of marine protected areas, to conserve, protect, and enhance their biodiversity, ecological integrity and cultural legacy.*

- **National Website** – <http://sanctuaries.noaa.gov/education/welcome.html>
- **Cordell Bank Sanctuary (CA):** <http://cordellbank.noaa.gov/education/welcome.html>
Contact: Jennifer Stock (Education and Outreach Coordinator) – jennifer.stock@noaa.gov
- **Gulf of the Farallones Sanctuary (CA):** <http://farallones.noaa.gov/education/welcome.html>
Contact: Carol Preston (Education Coordinator) – carol.a.preston@noaa.gov
- **Monterey Bay Sanctuary (CA):** <http://montereybay.noaa.gov/educate/welcome.html>
Contact: Amity Wood (Education & Outreach Coordinator) – amity.wood@noaa.gov
- **Olympic Coast Sanctuary (WA):** http://olympiccoast.noaa.gov/ocean_literacy/welcome.html
Contact: Jacqueline Laverdure (Education and Outreach Coordinator) – jacqueline.laverdure@noaa.gov; Nicole Harris (Education Specialist) – Nicole.harris@noaa.gov

Integrated Ocean Observing System (IOOS) – *Curriculum, Real World Data, and Multimedia*

** The Pacific Northwest Regional Association of IOOS – the Northwest Association of Networked Ocean Observing Systems (NANOOS)- is a coordinated network of people, equipment and technology working together to deliver data and information needed to increase understanding and support decision making about the region's shorelines, estuaries, and coastal ocean.*

- **National Website** – www.ioos.noaa.gov/community/education
- **NANOOS (Regional Site)** – <http://www.nanoos.org/education/introduction.php>
Contact: Amy Sprenger (Education and Outreach Coordinator) – asprenger@uw.edu

Pacific Northwest Bay-Watershed Education and Training (B-WET) Program – *Competitive Grants*

** B-WET is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment.*

- **National Website** – <http://www.noaa.gov/opportunities/bay-watershed-education-and-training-b-wet-grants>
- **Pacific Northwest B-WET** – http://olympiccoast.noaa.gov/ocean_literacy/bwet.html
Contact: Jacqueline Laverdure (Olympic Coast National Marine Sanctuary) – jacqueline.laverdure@noaa.gov

Pacific Marine Environmental Laboratory (PMEL) – *Climate, Ecosystem, and Tsunami Educator Resources*

** PMEL is a federal laboratory that makes critical observations and conducts groundbreaking research to advance our knowledge of the global ocean and its interactions with the earth, atmosphere, ecosystems, and climate. Key research areas at PMEL include ocean acidification, tsunami detection and forecasting, hydrothermal vent systems, fisheries oceanography, and long term climate monitoring analysis.*

- Laboratories in Seattle, WA and Newport, OR – <http://www.pmel.noaa.gov/education>
Contact: Adi Hanein (Education and Outreach Coordinator) – adi.hanein@noaa.gov

NOAA Office of Response and Restoration (OR&R) – Lesson Plans and Background Information on Oil and Chemical Spills

**OR&R is a center of expertise in preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, and marine debris.*

- Offices in Seattle, WA – <http://response.restoration.noaa.gov/training-and-education>
Contact: Vicki Loe (Communications Coordinator) – vicki.loe@noaa.gov

National Ocean Science Bowl (NOSB) – Regional Competitions in the Ocean Sciences

**The NOSB is a national high school academic competition with regional competitions for student teams to test their knowledge of the marine sciences including biology, chemistry, physics, and geology.*

- **California Palo Alto Sea Lion Bowl** – <http://sealionbowl.org>
Contact: Jennifer Saltzman (Region Coordinator) – sealionbowl@gmail.com
- **Oregon Salmon Bowl** – <http://ceas.oregonstate.edu/outreach/salmonbowl/>
Contact: Lindsay Carroll (Region Coordinator) – salmonbowl.nosb@gmail.com
- **Washington Orca Bowl** – <http://www.wsg.washington.edu/students-teachers/k-12-activities/orca-bowl/>
Contact: Maile Sullivan (Region Coordinator) – orcabowl@uw.edu

Centers for Ocean Science Education Excellence (COSEE) – Educator Workshops, Resources, Connect to Scientists

**COSEE is a network of over 270 institutional partners with the mission to spark and nurture collaborations among research scientists and educators to advance ocean discovery and make known the vital role of the ocean in our lives. (Most information is archived)*

- **National Website** – <http://www.cosee.net/>
- **COSEE California (CA)** – <http://www.coseeca.net/programs/foreducators/>
Contact: Lynn Tran (Center Manager) – lynn.tran@berkeley.edu
- **COSEE Pacific Partnerships (OR)** – <http://www.coseepacificpartnerships.org/>
Contact: Jan Hodder (Director) - jhodder@uoregon.edu or <http://www.coseepacificpartnerships.org/contact/>
- **COSEE Ocean Learning Communities (WA)** –
Contact: Dr. Phil Bell (Co-PI) - pbell@u.washington.edu or <http://www.coseeolc.net/contactus.cfm>

Joint Institute for Study of the Atmosphere and Ocean (JISAO) – Educator Resources, Undergraduate Internships

**The purpose of the JISAO is to foster research collaboration between the University of Washington and NOAA and is at the forefront of investigations on climate change, ocean acidification, fisheries assessments, and tsunami forecasting.*

- Offices in Seattle, WA - <http://jisao.washington.edu/education-outreach>
Contact: Jed Thompson (Education and Outreach Coordinator) - jedthom@uw.edu

Hatfield Marine Science Center (HMSC) – Visitor Center, Field Trips, Educator Professional Development

**The HMSC is a leading marine laboratory distinguished by its collaborative research partnerships. They currently host collaborative research and education programs from seven OSU colleges and six state and federal agencies on their 49-acre campus.*

- Located in Newport, OR - <http://hmsc.oregonstate.edu/visitor/education>
Contact: Nancee Hunter (Education Specialist) - nancee.hunter@oregonstate.edu

NOAA Science Camp - Resources, Connect to Scientists, Lesson Plans

**NOAA Science Camp is a highly-regarded, collaborative science program for middle school and high school-aged youth, held at the NOAA Western Regional Center in Seattle, WA, where scientists interact directly with camp participants to demonstrate how NOAA's multidisciplinary research addresses environmental issues on local and national levels.*

- Contact: Co-coordinators Lisa Hiruki-Raring (NOAA point of contact) - lisa.hiruki-raring@noaa.gov and Maile Sullivan (WA Sea Grant point of contact) - maile.sullivan@noaa.gov

Local NOAA Vessels – Follow Current Science off the Pacific Coast of Washington, Oregon, and Northern California

- **NOAA Teacher at Sea** (follow teacher blogs onboard the ships) - <http://teacheratsea.noaa.gov/>
- **Marine Operations Center-Pacific Fleet (Newport, OR)** - <http://www.moc.noaa.gov/MOC-P/index.html>
Contact: LCDR Joshua Slater (MOC-P Chief of Operations) - joshua.slater@noaa.gov or ChiefOps.MOP@noaa.gov
- **NOAA Ship Bell M. Shimada (Newport, OR)** - <http://www.oma.noaa.gov/learn/marine-operations/ships/bell-m-shimada>
- **NOAA Ship Rainier (Newport, OR)** - <http://www.oma.noaa.gov/learn/marine-operations/ships/rainier>

Northwest Data Resources – Historical and Real-Time Data

- National Tsunami Warning Center - <http://wcatwc.arh.noaa.gov/>
- Pacific NW Coastal Marine Data - <http://www.wrh.noaa.gov/pqr/marine.php>
- Northwest River Forecast Center - <http://www.nwrhc.noaa.gov/rfc/>
- Local Climate Data - <http://www.nws.noaa.gov/climate/index.php?wfo=pqr>
- Western Region Fire Weather - <http://www.wrh.noaa.gov/firewx/main.php>
- Regional Tide Predictions - <http://tidesandcurrents.noaa.gov/gmap3/index.shtml?type=TidePredictions®ion=>
- San Francisco Bay PORTS (Physical Oceanographic Real-Time System) - <http://tidesandcurrents.noaa.gov/ports/index.html?port=sf>
- West Coast Habitat Server (fisheries data) - <http://pacoos.coas.oregonstate.edu>
- Pacific Northwest Ocean Observing System Data (NANOOS Visualization System) - <http://nvs.nanoos.org>
- Pacific Northwest Graphical Weather Forecasts - <http://graphical.weather.gov/sectors/pacnorthwest.php>

Local Weather Events – Local Historical Weather Data

- Oregon's Top 10 Weather Events of 1900s - <http://www.wrh.noaa.gov/pqr/paststorms/index.php>
- Eastern Washington Weather Events and Photos - http://www.wrh.noaa.gov/otx/items_of_interest.php
- Top 10 Weather Events for NE OR/SE WA - http://www.wrh.noaa.gov/pdt/reference/history/top_ten.php
- The Weather Watcher (newsletter on inland NW weather) - <http://www.wrh.noaa.gov/otx/outreach/news/news.php>

NOAA Science On a Sphere® (SOS) Locations – Earth Systems Data Shown on a 6-foot Globe

** SOS is a room-sized, global display system that uses computers and video projectors to display planetary data onto a six foot diameter sphere, analogous to a giant animated globe. It was developed by researchers at NOAA to help illustrate complex environmental processes (atmospheric storms, ocean currents, climate change, etc...) in a captivating way.*

- Lawrence Hall of Science (Berkeley, CA) - <http://www.lawrencehallofscience.org/>
- Great Valley Museum (Modesto, CA) - <http://www.mjc.edu/instruction/sme/gvm/>
- Point Reyes National Seashore (Marin County, CA) - <http://www.nps.gov/pore/index.htm>
- NASA Ames Exploration Center (Moffett Field, CA) - <http://www.nasa.gov/centers/ames/home/exploration.html>
- Climate Corporation (San Francisco, CA) - <http://climate.com>
- Tech Museum of Innovation (San Jose, CA) - <https://www.thetech.org/>
- Oregon Museum of Science and Industry (Portland, OR) - <http://www.oms.edu/>
- Pacific Science Center (Seattle, WA) - <http://www.pacificsciencecenter.org/>
- Microsoft Visitor Center (Redman, WA) - <http://www.microsoft.com/about/companyinformation/visitorcenter/>